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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/700,523 | 11/15/2000 | David A. Kapilow | 1999-0096-3 | 6109 |

7590 09/28/2004

AT&T Corporation
PO Box 4110
Middletown, NJ 07748

EXAMINER

HARPER, V PAUL

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 2654 | H |

DATE MAILED: 09/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|------------------------------|------------------------|---------------------|--|
| | 09/700,523 | KAPILOW, DAVID A. | |
| Examiner | Art Unit | | |
| V. Paul Harper | 2654 | | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on ____.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 1 is/are rejected.
7) Claim(s) _____ is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/26/02.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ .

5) Notice of Informal Patent Application (PTO-152)

6) Other: ____ .

Detailed Action

U.S. National Stage Application

1. Acknowledgement is made of the indication that the present application is filed under 35 U.S.C. 371, of the indication that the required form PCT/DO/EO/903 is present, and of the use of transmittal form PCT/DO/EO/1390. Thus, the present application is being treated as a filing under 35 U.S.C. 371.

Information Disclosure Statement

2. The Examiner has considered the references listed in the Information Disclosure Statement dated 2/26/02. A copy of the Information Disclosure Statement is attached to this office action.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claim 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending

Application No. 09/700,524 in view of Chen (U.S. Patent 6,351,730), hereinafter referred to as Chen.

Regarding claim 1, Application No. 09/700524 (claim 1) claims:

• concealing the effect of missing speech information on generated speech, said speech information having been compressed and transmitted in packets to a receiver which does not receive one or more of such packets, the method comprising the steps of (claim 1, lines 3-11):

- forming a speech signal based on received packets representing speech information (claim 1, lines 9-13);
- in response to a determination that a packet is not available at the receiver to form the speech signal, synthesizing a portion of the speech signal corresponding to the unavailable packet using a portion of the previously formed speech signal (claim 1, lines 9-11).

But application No. 09/700524 does not specifically claim "wherein the number of pitch periods of the previously formed portion used in such synthesis is greater for speech of a fundamental frequency above a threshold than for speech of a fundamental frequency below the threshold." However, the examiner contends that this concept was well known in the art, as taught by Chen.

In the same field of endeavor, Chen teaches a technique for pitch calculation where it is necessarily true that for a fixed interval (here 4 ms) the greater the fundamental frequency the greater the number of pitch periods contained in the interval

(col. 18, lines 60-67, §C.4, Adaptive Frame Loss Concealment, also see col. 19, lines 50-59).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify application No. 09/700524 (claim 1) by using the steps, as taught by Chen, because the relationship between pitch period and fundamental frequency was well known.

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Chen.

Regarding claim 1, Chen discloses a method for speech and audio coding with adaptive frame loss concealment. Chen's method includes:.

- concealing the effect of missing speech information on generated speech, said speech information having been compressed and transmitted in packets to a receiver

which does not receive one or more of such packets, the method comprising the steps of (abstract, col. 18, line 40-53):

- forming a speech signal based on received packets representing speech information (Fig. 2, item 150, col. 18, lines 49-53);
- in response to a determination that a packet is not available at the receiver to form the speech signal, synthesizing a portion of the speech signal corresponding to the unavailable packet using a portion of the previously formed speech signal (Fig. 2, "FRAME LOSS INDICATOR FLAG," item 160, col. 18, lines 41-67),
 - wherein the number of pitch periods of the previously formed portion used in such synthesis is greater for speech of a fundamental frequency above a threshold than for speech of a fundamental frequency below the threshold (col. 18, lines 60-67, §C.4, Adaptive Frame Loss Concealment, where it is necessarily true that for a fixed interval (here 4 ms) the greater the fundamental frequency the greater the number of pitch periods contained in the interval, also see col. 19, lines 50-59).

Citation of Pertinent Art

5. The following prior art made of record but not relied upon is considered pertinent to the applicant's disclosure:

- Chen (U.S. Patent 5,615,298) discloses a technique for excitation signal synthesis during frame erasure or packet loss.

- Perkins et al. ("A Survey of Packet Loss Recovery Techniques for Streaming Audio," IEEE Network, Sept./Oct. 1998) teach various techniques for packet loss recovery and concealment.

Conclusion

Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks
P.O. Box 1450
Alexandria, VA 22313-1450

or faxed to:

(703) 872-9306

Hand-delivered responses should be brought to:

Crystal Park II
2121 Crystal Drive
Arlington, VA.
Sixth Floor (Receptionist)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. V. Paul Harper whose telephone number is (703) 305-4197. The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil, can be reached on (703) 305-9645. The fax phone number for the Technology Center 2600 is (703) 872-9314.

Art Unit: 2654

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service office whose telephone number is (703) 306-0377.



VPH/vph
September 14, 2004



VIJAY CHAWAN
PRIMARY EXAMINER